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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DEN OUDEN, Josephus, A., A.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **DUIJVESTIJN, Adrianus, J.**; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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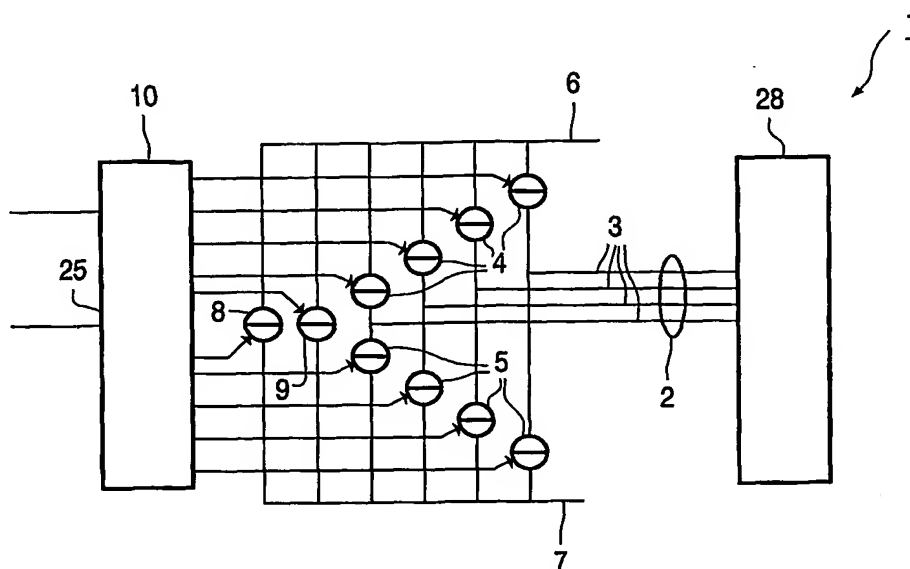
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[Continued on next page]

(54) Title: **DATA COMMUNICATION USING CONSTANT TOTAL CURRENT**



(57) Abstract: A data communication system, comprising at least three signal conductors and a first and a second power supply terminal, for supplying currents of mutually opposite direction to the signal conductors respectively. A driver circuit establishes respective combinations of currents through the signal conductors from a selectable set of combinations, which includes combinations with currents from the first supply terminal and to the second supply terminal, so that a sum of the currents through the signal conductors substantially has a same value for each combination and at least one of the conductors in operation does not merely function in a differential-pair relation with another one of the conductors, the driver circuit determining which of the combinations from the set are established depending on information to be transmitted.

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